Integrated Energy Policy Report Workshop on Transportation

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March 27, 2014

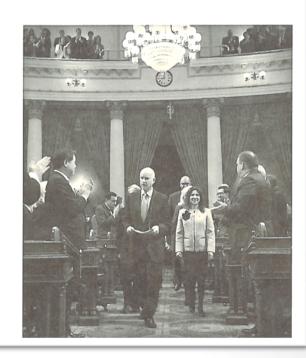
Governor Brown on Climate Change

"When we think about California's future, no long term liability presents as great a danger to our wellbeing as the buildup of carbon dioxide and other greenhouse gases in the atmosphere."

State of the State Address January 24, 2013



State of the State Address January 24, 2013



Governor Brown on Climate Change

"...you are witnessing an historic, small but powerful first step and it's only the beginning.... this will spread until finally we get a real handle and grasp on what is the world's greatest existential challenge-that is, the stability of our climate on which we all depend."



Pacific Coast Climate Event October 28, 2013

Climate Partnerships

OR, WA & British Columbia

PACIFIC COAST ACTION PLAN on CLIMATE AND ENERGY









PREAMBLE

The Governments of California, British Columbia, Oregon and Washington,

Pursuant to the Menorandow to Establish the Pacific Coast Collaboratio of June 2008, as provided for in Article 6; Affirming our shared vision of Pacific North America as a model of

"Ignorming our marries training are faither, events, conserva as a monoto to innovation that meastim our communities and creates jobs and new conomic opportunities for our combined population of 53 millione, Recognizing that the Pacific Coast is a region bound together by a common geography, shared infrastructure and a regional economy with a combined CDP of US \$2.8 trillion, which makes it the world's fifth largest;

Acknowledging the clear and convincing scientific evidence of climate change, ocean acidification and other impacts from increasing concentrations of earbon disoids in the atmosphere, which threaten our people, our economy and our natural resources; Emphasizing that states and provinces around the world are battling.

conomic growth, consumer savings and new jobs; Calibrating that our own governments have reduced greenhouse gas emissions by adopting regulatory, policy and market-based measures that shift energy generation to clean and tenevable sources, manage energy use through preserve efficiency and conservation, and enable and

energy use through greate efficiency and conservation, and enable and promote consumer choice for clean vehicles; Recalling the findings of the 2012 West Casts Clean Environs report which projected 1.03 million new jobs could be created in key sectors,

Supporting positive federal action to combat climate change, includin President Obamas climate action plan and proposed rules to limit greenhouse gas emissions from power plants;

Jaining the growing international convergence on the need to secure an international agreement to reduce global greenhouse gas emissions including discussions at the coming Conference of Parties meetings in Western (2013). 1 im. (2014) and Paris (2015) and

including discussions at the coming Conference of Parties meetings in Warsaw (2013), Lima (2014) and Paris (2015); and Agreeing that meaningful coordination and linkage between states an provinces across North America and the world on actions to reduce

NOW THEREFORE HEREBY AGREE AS FOLLOWS:

- Lead national and international policy on climate chan with actions to:
- Direct our relevant agencies and officials so work together to:

 1) Account for the costs of carbon pollution in each jurisdiction.

 Onegon will build on caisting programs to set a price on carbon emissions. Washington will set binding limits on carbon consistence.

existing carbon-pricing programs. Where possible, California, Berish Columbia, Oregon and Washington will link programs fo consistency and predictability and to expand opportunities to gre

 Harmonize 2050 targets for greenhouse gas reductions and develop mid-term targets needed to support long-term reductions.

Climate scientists have identified the scale of persolatones gas reductions that must be addicted globally to stabilize the climate. Where they have not already done so, California, British Carlonio, Ucegos and Widenigons will catalosh long-term reduction targets that reflect these scientific findings. To advance long-term death-stone, Widenigons already has in place a mid-term 2025 target methods to the place and selection 2025 target and the control of the control

 Affirm the need to inform policy with findings from climate wiener.

> eaders of California, British Columbia, Oregon and Washington firm the scientific consensus on the human causes of climum using and in very real impacts, most recently documented visconies around the world in the Interoperumneutal Panel Climate Clamps, 17th Amountain Report released in greenber 2013, as well as other reports such as the Scientific greenber 2013, as well as other reports such as the Scientific to International Conference on the Conference of the International to International Conference on the International Conference on the International Conference on the International Conference on the International Conference interface on the International Conference on the International Con

 Cooperate with national and sub-national governments arou the world to press for an international agreement on climate change in 2015.

The governments of California, British Columbia, Ougon and of support for a state of the columbia of support for a state of an extension of the columbia of support for a state of a greeness of the columbia of the columbia

 Enlist support for research on ocean acidification and take acti to combat it.

Ocean health underpins our coastal shellfish and fisheries economies. The governments of California, British Codumbia, Oregon and Washington will use the American and Canadian federal governments to take action on ocean acidification, includin crucial research, modeling and monitoring to understand its easeer and impacts.

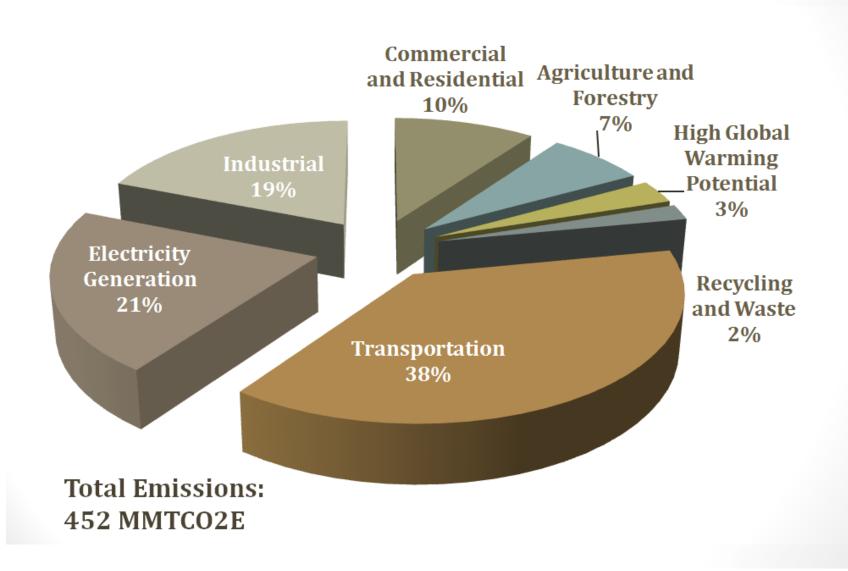
- II. Transition the West Coast to clean modes of transportat and reduce the large share of greenhouse gas emissions for this sector with actions to:
- Adopt and maintain low-carbon fuel standards in each jurisdiction.

Oregon and Washington will adopt low-carbon fucls standard

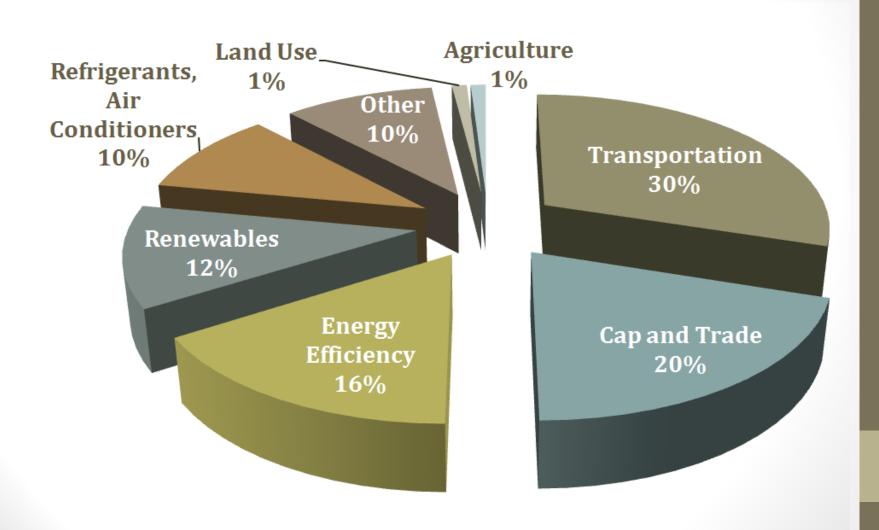
National Government of China



California 2010 Emissions

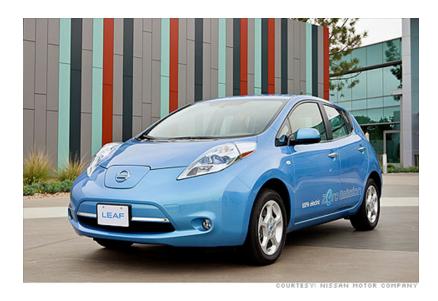


AB 32 Scoping Plan



Governor's ZEV Executive Order -2050 Goal

 Greenhouse gas emissions due to transportation are 80% less than 1990 levels



Transportation Policies: Comprehensive Approach

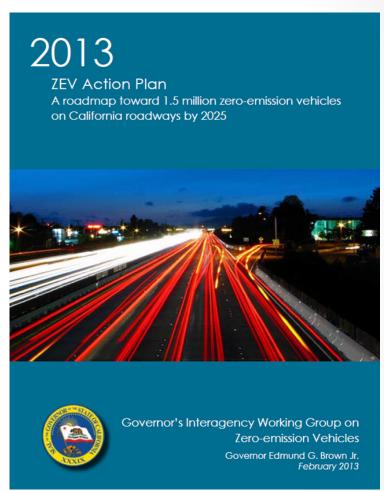
- Advanced Clean Cars
- Low Carbon Fuel Standard
- SB 375
- High-speed rail
- Port electrification
- Zero-Emission Vehicles





ZEV Executive Order & Action Plan

- Goal of 1.5 million ZEVs by 2025
- Complete needed infrastructure and planning
- Expand consumer awareness and demand
- Transform fleets—10% by 2015;
 25% by 2020
- Grow jobs and investment in the sector



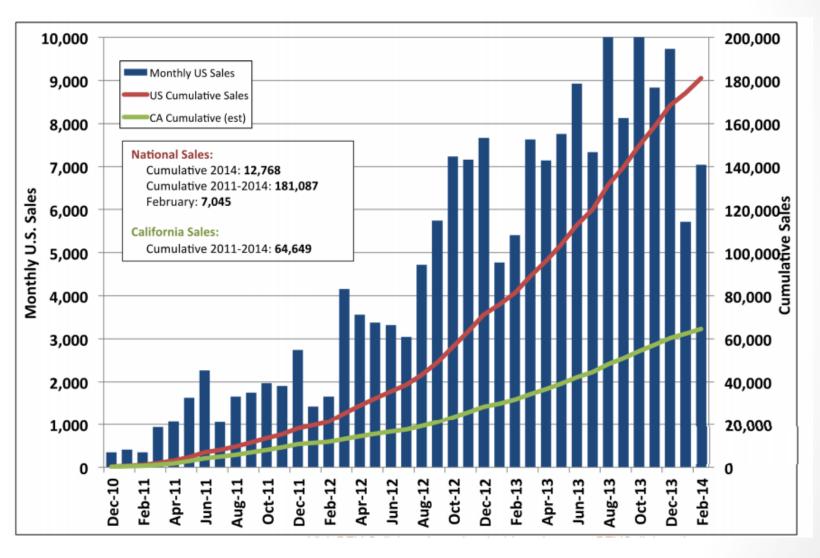
Multi-State ZEV MOU (2013)

- Governors of 8 states: California, Connecticut, Maryland,
 Massachusetts, New York, Oregon, Rhode Island, Vermont
- 3.3 million ZEVs on the road by 2025



State Zero-Emission Vehicle Programs
Memorandum of Understanding

ZEV Sales – February 2014



ZEV Plan – Milestones Achieved

- Reauthorization of AB 118
- Open access to charging stations & network/roaming interoperability
- Building codes being updated to be ZEV ready
- Guidance documents
 - OPR guidebook for local communities
 - DGS guidance for charging infrastructure
- HOV decals distributed by car dealers
- V2G roadmap
- PACE financing for charging stations
- Ombudsman in GO-Biz for hydrogen fueling stations & ZEV infrastructure

ZEV Plan – Ongoing Challenges

- Raise consumer awareness & demand
 - Reduce upfront purchase costs
- Increase access for low & middle income consumers
- Pilot for financing charging stations
- Grow medium-duty and heavy-duty fleets
- Support hydrogen development & help build network of hydrogen fueling stations

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